Author's response to reviews

Title: The evaluation of a nationwide training program in smoking cessation and the trainees' adherence to a practice guideline

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Author's response to reviews: see over
The cover letter

Dear editor and reviewers:

Enclosed is one copy of our manuscript, entitled: “The evaluation of a nationwide training program in smoking cessation and the trainees’ adherence to a practice guideline” an original article to be considered for publication in BMC Public Health. The followings are our response to editor’s and reviewers’ questions.

Editorial Board comments:

1) ?Most trainees were satisfied or very satisfied with the content, the teaching skill of the lecturer and the quality of the material?.

   PROBLEM: It appears that the physicians in Taiwan were happy with the one day education suggesting that the program should be continued in Taiwan. However, it is impossible to know from the study design if this is mainly due to the content of the program or to a low level of smoking cessation knowledge amongst physicians in Taiwan. Thus it is difficult to generalize if the suggested program would benefit other countries.

ANS: We agree with editor’s opinion that the high satisfaction of Taiwanese doctors may due to low level of knowledge in smoking cessation. However, even attending a lecture concerning the topics in unfamiliar areas, physicians still have the ability to recognize whether the lecture is well organized or not. Our report showed that the quality of our training courses granted satisfaction of attendants.

Because there was the concern that the results may due to low level of physicians’ knowledge, we had the following paragraph in discussion section:

“It is not surprising that our program generated high levels of satisfaction and had significant pre- and post-test differences in trainee knowledge. Most of the Taiwanese physicians were naive to smoking cessation information and skills. There were no courses teaching smoking cessation in medical schools and very few continuing medical education courses focused on smoking cessation.”

We hope this paragraph can reduce the concern that we over-estimated the satisfaction of the attendants.
2) Among seven topics covered in the training, the pharmacotherapy of smoking cessation, the clinical skills related to smoking cessation and the trans-theoretical model were rated the most satisfactory. All seven topics received average scores of more than four in three evaluating items, indicating there was not any one topic especially inferior to others.

**PROBLEM:** It is not particularly surprising that physicians value pharmacotherapy. Also, people (including physicians) who have no or limited knowledge of smoking cessation and other addiction or behavior change methods would be inclined to rate ALL knowledge on the subject as valuable. Percentage of people rating different components as useful is not a particularly useful information for the reader without being able to analyze the content of the information given in the component under scrutiny.

**ANS:** The key point we presented here was that there was not any of the seven topics in our training regarded as unhelpful by the attendants, indicating the course was well organized. The percentage of the attendants rating different components as useful is not a particularly useful information for the readers without being able to analyze the content. But for readers who are working in smoking cessation education, we believe it is meaningful to share our experiences which components of the training program were more appreciated by the attendants.

To increase the understanding of general readers regarding the contents of training, we add a paragraph in the discussion section as the following:

“There was not a standard how a smoking cessation training program should be organized or how many hours physicians should be trained. We complied with the suggestion of US PHS guideline that the physicians provide pharmacotherapy and short intervention less than 10 minutes in encounters. Therefore Pharmacotherapy of smoking cessation was an essential topic. The trans-theoretical model and the clinical skills for smoking cessation were the theoretical and practical components of counseling training. We included an hour of clinical case discussion to simulate real world cases and enhanced the interaction between lecturers and audience. The strategy of tobacco control illustrated the global tobacco issues and the policy aspects of tobacco control. Two additional topics were added in 2007: nicotine addiction and withdrawal, and the risks of smoking and the benefits of quitting. We believed the two new topics could enhance the physician’s ability in counseling. People may concern a sex-hour training was not enough due to the complexity of behavior-changing counseling. The purpose of our counseling training was to provide the short
intervention during physician’s daily practice, not the cognitive-behavior therapy which is usually provided by a psychotherapist. It costs too much to train a physician to provide cognitive-behavior therapy and such training was not suggested by smoking cessation guidelines.”

3) “Confidence in providing smoking cessation services after the training is shown in Table 2. Most trainees were confident or very confident in five evaluating items.?

PROBLEM: A study among GPs in the Scandinavian/Nordic countries showed that GPs who had little experience and education (one day or less of formal training) and those who were not active in smoking cessation also were those who were most confident that they had sufficient knowledge or training to help their patients to quit. Similar results have been reported from other countries. Thus confident doctors may only indicate that they underestimate the relative complexity of smoking cessation support?

ANS: We agree with the editor that the physicians showing confidence in smoking cessation might underestimate the relative complexity of smoking cessation support. However, for physicians who are not familiar with the skill of smoking cessation, the only way to improve their skill is to learn by doing. This training program provided the essential knowledge and theoretical background required for their practice, the next step is to provide the service to the patients. If the physicians didn't feel confident to provide the services, there is no chance to improve their skills. Therefore we believe it is important that the training program “enable” the attendants to provide services. There will be the concern whether the quality of the initial service is good enough. It was the reason why we implemented practice guidelines. The 5A's guideline advocated by US PHS served as the key of quality assurance in our program.

4) For trainee knowledge, there were 536 effective questionnaires collected from 542 trainees for a response rate of 98.9%. The mean score of pre-test was 7.14, while the mean score of post-test was 9.22. The mean difference between pre- and post-test scores was 2.08 (SD = 1.79). The paired t-test revealed significant difference (P < 0.001).

PROBLEM: The short term assessment was done before and after the course. It is not particularly surprising that the physicians managed to learn something. The opposite would have been surprising.

ANS: We agree with editor that the opposite results would be more surprising. The
data revealed the fact we studied. We understand the pre-post test didn’t prove the efficacy of the training, therefore we have the component of long term evaluation.

5) The long term evaluation is of limited value due to very low response rate of 38.0%.

ANS: We knew the limitations of our long term evaluation data. We performed statistics examination to compare the demographics of respondents and non-respondents, the results revealed there was no significant difference in gender, age and training year. There was significant difference in specialty. There were more family medicine physicians in respondents. (Table 4). We concluded the sample of our respondents were representative, however, more tend to be the opinions of family medicine physicians.

We addressed the issue of low response rate in the study limitation section as the following:

“It has been well recognized that physicians in Taiwan are reluctant to answer questionnaires. For example, a study investigating physicians’ attitudes toward DNR of terminally ill cancer patients in Taiwan had a response rate of 17.6% [24]. Another study investigating obstetricians willingness to practice collaboratively with midwives had a response rate of 15.6% [25]. These were national studies and published in an international journal. To our knowledge, the response rate of our study was high compared to other Taiwanese studies [26-29].”

If the editor considers high response rate to be the “gold standard” of publication, most of the Taiwanese studies could not be published. We believe it is not beneficial to the international society. We shall appreciate if the editor kindly accept the low response rate of this study.

6) Finally, it may be of interest to the international smoking cessation society that the Taiwan government pays for smoking cessation activities. However, it is not entirely true that ?After England, Taiwan is the second country in the world where the government pays for smoking cessation? e.g. in Sweden doctors can receive reimbursement for engaging in smoking cessation activities. In summary, though this study may be of value for Taiwan it is of limited interest to the international tobacco cessation society and is not suitable for publication in BMC-Public Health in its present state. However, it may considered again after major revision
if the authors can respond to the above points (problems) as well as those highlighted by the referees.

ANS: "After England, Taiwan is the second country in the world where the government pays for smoking cessation". This is the statement issued by the Department of Health, Taiwan, who I believe should tell the truth.

As the editor mentioned Sweden, I queried the WHO FCTC Party reports website (http://www.who.int/fctc/reporting/party_reports/en/index.html). The report of Sweden on 2007/04/02 stated that "NRT is available over the counter in pharmacies but not reimbursed. Bupropion and Varenicline are available only by prescription but not reimbursed." (In section 14.2d).

Taiwanese government has reimbursed NRT and Bupropion since 2002, and reimbursed Varenicline since 2007, though partially. If the editor found any country in this list reimbursing both smoking cessation medications and consultation before 2002, please tell me. I will delete this statement accordingly. I also have to tell the officers of Department of Health that what they believed is not true.

Although Taiwan is not advanced in smoking cessation services, we did progress a lot in the recent years. Before 2002, there were probably less than 20 physicians providing smoking cessation services, while there are more than 4,000 now. The key point of the progress is not only the reimbursement policy, but also the training program we present in the manuscript. Without appropriate training, the reimbursement couldn’t guaranty the quality of the services. We would like to share our experience in designing and evaluating the training program. We shall appreciate if the editor agree with the value of this study.

Sincerely yours

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Title: The evaluation of a nationwide training program in smoking cessation and the trainees' adherence to a practice guideline

Version: 1 Date: 1 February 2009

Reviewer: Pinpin Zheng

Reviewer's report:
This is an interesting paper and describes an important study which evaluates a nationwide program in smoking cessation. It seems that this kind of data had not been published before or that similar studies had been conducted in mainland China or TW. However, the result and discussion part should be improved (details are in the following) before it can be published.

Dear reviewer:

Thank you for the comments on this study. We answer your questions in the following.

1. The title of the paper seems too long. According to the methods (page 3, line 10-11) described in the paper, the evaluation should include the extent of adherence to the guide. Therefore, “the adherence to a practice guideline “ in the title could be deleted.

ANS: Thank you for the suggestion. We have considered to change the title as you suggested. However, the data of our trainees’ adherence to the practice guideline could be the interest of certain readers. They probably are not interested in the training program. Because the comparison of the adherence to practice guideline among several countries were also important in our manuscript, we decide not to change the title finally. If you still suggest to change the title, please don’t hesitate to let us know.

2. 5As guideline should be a continuous process. The evaluation on adherence to a 5A should at least answer such a question: How many trainees could practice all steps in 5A? This seemed more important than any single step.

ANS: We appreciate your suggestion and update our data in results section as the following:

“There were 330 trainees (43.4%) who performed all 5As for at least half of their patients”. Because of the format problem, we did not update Table 5.
3. Page 11, line 10. The authors should provide more details regarding the multiple regression model. What are the independent factors? the dependent factors? How many confounders are considered and adjusted? Those description will allow a more clear understanding for the analysis of the result.

ANS: We didn’t present multiple regression data in Table 6, however, we use the significant variables in table 6 to perform multiple regression. The process was described as “We used multiple regression models to examine these factors further.”. “these factors” indicated the significant factors described in the previous paragraph “The confidence scale had “specialty of physicians” and “contracted with the BHP” as significant factors, while the adherence scale had age and “contracted with the BHP” as significant factors.”. Combined with Table 6, these paragraphs already clearly specified the dependent and non-dependent variables used in the multiple regression. No adjustment was made in this analysis, therefore we did not mention adjustment. Because the process and results of our multiple regression analysis were not complicated (actually very simple), we preferred the current style of presentation.

4. The comparison between pre and post scores should indicate the most powerful evidence in evaluation. However, the authors only use a limited space to present the result. I strongly recommend the authors give a table to present this comparison.

ANS: We appreciate your suggestion. We add a Table 3 into the manuscript.

5. Page 12, the last paragraph. The difference between the confidence in the short term and long term survey can not be simply explained by whether contracting to BHP. There seemed lack of evidence to support this opinion.

ANS: We appreciate your suggestion. We add a “possible” term into the paragraph, we also change the factor “contracting with BHP” into “providing services”, which is more precise. We also add other possibility “It was also possible due to the trainees’ under-estimation of the complexity of smoking cessation service during the short term evaluation.”. Please refer to the updated paragraph.

6. Page 14, line 15. The author refers other studies to make a conclusion that there may be some correlation in the confidence among physicians and adherence to guideline. However, there is no evidence to show this correlation. The authors should also include this analysis in the result section.
ANS: We did find correlation between confidence of the physician and adherence to practice guideline. Please refer to the result section page 11:
“We also studied the correlation between the confidence and adherence scales. The Pearson correlation test revealed significant results (P < 0.001).”

7. Page 15, the last paragraph. Although this is no difference in the gender, age and training year between respondents and non-respondents, it does not mean there were not obvious biases in the sample. For example, the trainees who had more confidence to practice 5A guideline, had more experience and in smoking counseling were more likely to respond to the questionnaire course should emphasis more to improve the confidence among the trainees……##?

ANS: We appreciate your suggestion. We add a paragraph at the end of the section. “However, we could not exclude the possibility that physicians who were better in providing smoking cessation services would be more likely to respond to the questionnaire.”.

8. The discussion part seemed a little loose and should be re-orgnized. The discussion should not be the simple description and explaining of the results. The authors should give first give the most important findings of the study, and then present the opinions of the authors that is consistent with the results and may give geographic and longitudinal comparison of the results. Finally, the authors may have to present implications and recommendations that is related with the main results.

ANS: We appreciate your suggestion. However, we already did our best to comply the principles you suggested. In the first paragraph, we pointed out the most important difference between English and Taiwanese policy, which is the government sponsored training program. This is the major value of the study. In the second and third paragraph we described the major findings of short term and long term evaluation. We also explored the possible reasons to explain the results. The fourth paragraph we presented the important finding that the adherence to practice guideline was higher in our study compared to other countries without physicians training. We also indicated the results might be over-estimated and discussed the alternate ways to collect adherence data. In the fifth paragraph we explored the influence of demographic data on the adherence of guideline. We also reviewed the similar and different finding of other studies. All other paragraphs were related to the limitation and designing issues
of the studies. The conclusion was concise and pointed out important findings in this study. If you find any of these arrangements to be improved, we are willing to listen to your suggestions.

9. Page 3 conclusion. Conclusion should point out the main finding of the study. I don’t think it is reasonable to conclude that adherence among physicians in Tw are better than studies in other countries in the conclusion part. The evidence didn’t seem strong enough to confirm this statement. In addition, that is not the most important finding in this study.

ANS: We appreciate your comments. The purpose of the study is to evaluate the short term and long term efficacy of the training program. The conclusion should include the most important finding of these two issues. For short term evaluation, the program was satisfactory (by satisfaction data) and effective (by pre-post test data). The adherence to the practice guideline is the most important finding of long term evaluation and should be reported. Currently we did not find any study revealing higher adherence rates than ours. This is an international comparison and the evidence is feasible due to all studies asking the same 5As questions. We also discussed a lot about the limitations of the study and the readers should understand the level of evidence. To avoid the sensitive issue of country names, we decide to remove the names of countries we compare to. The final result is “Adherence to a practice guideline in our study was better than studies without physician training in other countries”.

The conclusion is not intended to compromise the reputation of other countries, but addresses the important issue of physician training. We shall appreciate if you kindly agree with our position.

10. The writing is clear. However, I am not a native speaker. It certainly might be of value if a native speaker checked this paper for any possible misuse.

ANS: We appreciate your suggestion. Except for updated contents, the original manuscript was corrected by a professional editor who is a member of American Medical Writers Association working for MedCom Asia, Inc..
Title: The evaluation of a nationwide training program in smoking cessation and the trainees' adherence to a practice guideline

Version: 1 Date: 28 January 2009
Reviewer: Marc Willemsen

Reviewer's report:
This manuscript describes a pre-post study examining the effectiveness of a Taiwanese training program for physicians. The manuscript is generally well written. Minor essential revisions. The manuscript might be further improved by paying attention to the following points.

Dear reviewer:

Thank you for the comments on this study. We answer your questions in the following.

1. a 6-hour training seems rather limited for the purpose of training physicians (who are inexperienced in the field of counseling people with a serious addiction such as smoking) in counseling skills. It might be enough for the ask, advice and assess elements, but probably not for assist and arrange. A discussion of the length of the training in light of what is required from the physicians would be in order in the discussion section.

ANS: We appreciate your suggestion. We add a paragraph in discussion section as the following:

“There was not a standard how a smoking cessation training program should be organized or how many hours physicians should be trained. We complied with the suggestion of USPHS guideline that the physicians provide pharmacotherapy and short intervention less than 10 minutes in an encounter. Therefore Pharmacotherapy of smoking cessation was an essential topic. The trans-theoretical model and the clinical skills for smoking cessation were the theoretical and practical components of counseling training. We included an hour of clinical case discussion to simulate real world cases and enhanced the interaction between lecturers and audience. The strategy of tobacco control illustrated the global tobacco issues and the policy aspects of tobacco control. Two additional topics were added in 2007: nicotine addiction and withdrawal, and the risks of smoking and the benefits of quitting. We believed the two new topics could enhance the physician’s ability in counseling. People may concern a six-hour training was not enough due to the complexity of behavior-changing
counseling. The purpose of this counseling training was to provide the short intervention during physician’s daily practice, not cognitive-behavior therapy which is usually carried out by a psychotherapist. It costs too much to train a physician to provide cognitive-behavior therapy and such training was not suggested by smoking cessation guidelines.”

*p.12* One in 6 physicians in Taiwan received the training. Is this a good score for the reach of the training? How does this relate to other countries such as UK? To mee one in 6 seems rather low, given that to follow the training is mandatory if a fysician wants to be reimbursed for smoking cessation. Why is this not higher?? Please discuss this issue.

ANS: one in six physicians including dermatologists, eye doctors, ENT doctors, etc. who are less likely to provide smoking cessation services. Also including residents in training. We didn’t find data indicating how many doctors receiving smoking cessation training in other countries, however, considering a single training program, we believe one in six physicians nationwide is a high rate comparing to other training program.

*p.6* 6,009 physicians were certified, while 3,887 actually provided smoking cessation services. So: only half of those who were certified (and followed the training??) actually applied the guideliness in their daily practices?? This contradiction needs to be explained.

ANS: We change the paragraph into “there were 3,887 physicians contracting with BHP and provide smoking cessation services.” This was the statistics provided by BHP and not represented all doctors providing services. We also analyzed the adherence to 5As of physicians who did not contract with BHP in the discussion section as the following:

“The trainees not contracting with BHP practiced 5As as follows: 75.4% for ask, 84.1% for advise, 66.3% for assess, 37.7% for assist, and 34.7% for arrange. These data represented the adherence to 5As guideline without the incentive of payment.”

Why there were many physicians receiving training but not contracting with BHP is an issue requiring further study. We also pointed out this issue at the end of the discussion section as the following:
“It would be interesting to explore the reasons why 30% of the trainees were not contracting with BHP and not getting reimbursement. Less than 1% of trainees answered “unconfident” or “very unconfident” in providing smoking cessation services in the short term evaluation. The discrepancy between the confidence in providing services, and the practice of providing the services requires further study.”

We have no answer currently, this is an issue requiring further study.

p7. Why restrict the long-term evaluation to 2002 - 2006, while 2007 data were also available?

ANS: We intended to evaluate the physicians who have practiced smoking cessation for more than one year as the subjects of long term evaluation. The physicians practicing smoking cessation less than one year were not esteemed as the subjects of long term evaluation. Because this study was conducted in 2007, we recruited physicians receiving training during 2002 to 2006.

p7. The 'short-term evaluation' might probably be better named 'process evaluation', since this is what they did. How long after the training was the 'short term' evaluation? Immediately following the session, part of the session, one week later??

ANS: We appreciate your comments. We didn’t preferred the term “process” because this will be confused with the “structure, process and outcome” model which was not conducted in our study. The “short term” is the contrast to “long term” which would be easier for readers to understand. We administrated the short term evaluation as part of the session. (in the same day of training).

p. 8. How exactly was the face validity of the measurement instrument done. 'communication between members' is too vague.

ANS: The experts communicated with each other and achieved consensus through e-mail. There was not a standard format of communication. We didn’t explain the process in details because the process was in fact very simple and straightforward.

p.9: what exactly was the null hypothesis?

ANS: The purpose of this study was to evaluate the efficacy of training, the null
hypothesis of short term evaluation was that the knowledge of trainees was similar before and after the training. The null hypothesis was rejected because the paired-t test revealed significant difference between pre and post tests. The null hypothesis of long term evaluation was that the adherence to 5As guideline was similar between our study and studies without physician training. The null hypothesis was rejected due to our study had higher adherence rate than other studies, though we didn’t carry out a statistical examination. We didn’t indicate the null hypothesis in the manuscript because it seemed to be more complicated if we did so.

p.11. I don’t feel it is appropriate to do a Cronbach’s alpha on the adherence scale. This seems more an index then a real scale where the individual items are expected to measure the same underlying construct: each ‘A’ is a distinct element of the protocol. The higher the score, the more elements of the protocol one adheres to.

ANS: We appreciate your comments. We agree with you that each component of 5As could be a distinct measurement item. However, they were correlated with each other as well. The people who were more likely to “ask” patient’s smoking status were also more likely to provide “advise”. As you suggested, the whole adherence scale was expected to measure the same underlining construct. If we consider the adherence to 5As is a construct, it is reasonable to calculate the Cronbach’s alpha.

p. 13. Over-estimation of adherence levels (which indeed are rather high!): can this be explained by cultural factors? if so, please indicate!

ANS: We appreciate your suggestion. We add a paragraph in the study limitation section as the following:

“The Chinese culture possible made people tend to choose the “right” answer and over-estimated the adherence. It was not a problem when comparing our data with the studies in China and Hong Kong, but could be a problem when comparing our data with studies in other non-Chinese countries.”

p.1.6 low response rate was explained by 'Taiwanese culture', which was understandable. Most readers will not understand this, because of unfamiliarity with the Taiwanese culture. Further explanation is warranted.

ANS: when we said “understandable”, it was based on the observation that most of the questionnaire sent to Taiwanese physicians had a low response rate. If high
response rate is a gold standard requirement for publication, very few Taiwanese studies could be published. We believe such situation is not beneficial to international society. We didn’t intend to explore the reason because it is beyond the scope of this study, and there is not a well known answer to this question. We apologize that we can not give more explanations to this issue.

Table 4. From the table is seems that adherence to all of the 5 A’s was scored by using the same set of answers (none of the patients - almost all patients). This seems appropriate for asking smoking status, but not for the other elements of the protocol, since this will only we done among smokers cq smokers who are motivated to quit. It might help if the exact wording of the 6 adherence questions would be provided in the text.

ANS: We appreciate your suggestions. We added “smokers” to “advise”, “Assess”, “Assist” and “Arrange” items in Table 5 (previous Table 4). We had the word “smokers” in our original Chinese version of questionnaire, however, we lost it in the English translation. This mistake may cause readers misunderstanding that we indicated all patients, not limited to smokers.